

S/N 10/815,262

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: John F. Engelhardt et al.

Examiner: Kevin Hill

Serial No.: 10/815,262

Group Art Unit: 1633

Filed: March 31, 2004

Docket No.: 875.074US1

Customer No.: 21186

Confirmation No.: 7471

Title: COMPOUNDS AND METHODS TO ENHANCE rAAV TRANSDUCTION

RULE 132 DECLARATION

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CONSIDERED /AW/ 8/2/09

We, Dr. John Engelhardt and Dr. Ziying Yan, declare and say as follows:

1. We are two of the co-inventors of the above-identified application and we make this Declaration in support of the patentability of the pending claims.

2. In the Office Action mailed December 4, 2008 for the above-referenced matter, the Examiner rejected claims 1-2, 4-7, 9-23, 43-44, 46, 48-50, 61, and 63-64 under 35 U.S.C. § 103(a) as being unpatentable over Duan et al. (J. Clin Invest., 105:1573 (2000)) in view of Kiyomiya et al. (Cancer Res., 61:2467 (2001)), Maitra et al. (Am. J. Physiol. Cell Physiol., 280:C1031 (2001)) and Engelhardt (U.S. Patent No. 6,436,392); claim 62 under 35 U.S.C. § 103(a) as being unpatentable over Duan et al. in view of Kiyomiya et al., Maitra et al. and Engelhardt et al. and further in view of Voinea et al. (J. Cell. Mol. Med., 6:465 (2002)); and claim 24 under 35 U.S.C. § 103(a) as being unpatentable over Duan et al. in view of Kiyomiya et al., Maitra et al., and Engelhardt et al. and further in view of Hirsch et al. (U.S. Patent Application Publication No. 2003/0003583).

3. Duan et al. disclose that the enhancement of AAV transduction by the combination of LLnL and EGTA might be due to reduced degradation of internalized virus and an increased rate of endocytosis. In this regard, the former activity can be attributed to LLnL, a proteasome inhibitor which does not alter AAV binding to cell surfaces or internalization, while